

**Listing of Claims:**

This listing of claims reflects all claim amendments and replaces all prior versions, and listings, of claims in the application (material to be inserted is in **bold and underline**, and material to be deleted is in ~~strikeout~~ or (if the deletion is of five or fewer consecutive characters or would be difficult to see) in double brackets [[ ]]).

1. (Currently Amended) A lamp housing comprising:

a reflector to reflect visible light and to pass radiation emitted from a light source disposed within the reflector; and

a housing coupled to the reflector, the housing having an inner surface, **contoured similarly to the reflector**, to absorb passed radiation and an outer surface having a plurality of formations so that the absorbed radiation can be transmitted as heat from the inner surface to the outer surface, wherein the reflector is disposed substantially completely within the housing.

2. (Currently Amended) The lamp housing of claim 1, wherein the housing is ~~further capable of blocking the~~ **substantially blocks** visible light that strays from the reflector.

3. (Previously Presented) The lamp housing of claim 2, wherein the inner surface of the housing is prepared to block the stray visible light.

4. (Cancelled)

5. (Currently Amended) The lamp housing of claim 2[[4]], wherein the inner surface of the housing is prepared to enhance absorptivity of the passed radiation by applying a coating of an opaque material.

6. (Previously Presented) The lamp housing of claim 5, wherein the opaque material is paint.

7. (Currently Amended) The lamp housing of claim 2[[4]], wherein the inner surface of the housing is prepared to enhance absorptivity of the passed radiation by anodization.

8. (Previously Presented) A lamp housing comprising:

a reflector capable of reflecting a visible light but passing a radiation emitted from a light source disposed within the reflector; and

a housing coupled to the reflector, the housing having an inner surface capable of absorbing the passed radiation and an outer surface having a plurality of formations to enlarge the area of the outer surface so that the absorbed radiation can be transmitted as heat from the inner surface to the outer surface at a reduced temperature, wherein the inner surface of the housing is prepared to enhance absorptivity of the passed radiation by peening, wherein the housing is further capable of blocking the visible light that strays from the reflector.

9. (Previously Presented) A lamp housing comprising:

a reflector capable of reflecting a visible light but passing a radiation emitted from a light source disposed within the reflector; and

a housing coupled to the reflector, the housing having an inner surface capable of absorbing the passed radiation and an outer surface having a plurality of formations

to enlarge the area of the outer surface so that the absorbed radiation can be transmitted as heat from the inner surface to the outer surface at a reduced temperature, wherein the inner surface of the housing is prepared to enhance absorptivity of the passed radiation by knurling, wherein the housing is further capable of blocking the visible light that strays from the reflector.

10. (Previously Presented) The lamp housing of claim 2, wherein the outer surface of the housing blocks the stray visible light.

11. (Cancelled)

12. (Previously Presented) The lamp housing of claim 1, wherein the absorbed radiation is infrared (IR) radiation.

13. (Previously Presented) The lamp housing of claim 1, wherein the plurality of formations are plates disposed in a parallel manner across the outer surface of the housing.

14. (Previously Presented) The lamp housing of claim 1, wherein the plurality of formations are fins disposed longitudinally across the outer surface of the housing.

15. (Previously Presented) The lamp housing of claim 1, wherein the plurality of formations are rings disposed latitudinally across the outer surface of the house.

16. (Previously Presented) The lamp housing of claim 1, wherein the housing and the reflector are formed as an integral unit.

17-23. (Cancelled)

24. (Previously Presented) An apparatus comprising:

a means for a reflector that is capable of reflecting a visible light but passing a radiation emitted from a means for a light source disposed within the reflector; and

a means for a housing coupled to the reflector means, the housing means having an inner surface and an outer surface, wherein the housing means include a means for absorbing the passed radiation through the inner surface and a means for enlarging the area of the outer surface with a plurality of formations so that the absorbed radiation can be transmitted as heat from the inner surface to the outer surface at a reduced temperature, wherein the means for absorbing the passed radiation through the inner surface is enhanced by peening the inner surface.

25. (Previously Presented)            An apparatus comprising:

a means for a reflector that is capable of reflecting a visible light but passing a radiation emitted from a means for a light source disposed within the reflector; and

a means for a housing coupled to the reflector means, the housing means having an inner surface and an outer surface, wherein the housing means include a means for absorbing the passed radiation through the inner surface and a means for enlarging the area of the outer surface with a plurality of formations so that the absorbed radiation can be transmitted as heat from the inner surface to the outer surface at a reduced temperature, wherein the means for absorbing the passed radiation through the inner surface is enhanced by knurling the inner surface.

26-32. (Cancelled)

33. (Currently Amended)            A method for managing light and radiation in a lamp comprising:

disposing a lamp that emits a visible light and a radiation in a reflector, the reflector

reflecting the visible light but passing the radiation; and

encasing the lamp and reflector substantially completely within a housing, the housing having an inner surface **configured to substantially correspond to the reflector, which** that absorbs the passed radiation and an outer surface from which extend a plurality of formations to enlarge the area of the outer surface so that the absorbed radiation can be emitted as heat from the outer surface at a reduced temperature.

34. (Original)        The method of claim 33, further comprising blocking the visible light that strays from the reflector with the housing.

35. (Original)        The method of claim 34, wherein the blocking is performed by the inner surface of the housing.

36. (Original)        The method of claim 34, wherein the blocking is performed by the outer surface of the housing.

37. (Cancelled)

38. (Original)        The method of claim 34, wherein the absorbed radiation is infrared (IR) radiation.

39. (Original)        The method of claim 34, wherein the plurality of formations are plates disposed in a parallel manner across the outer surface of the housing.

40. (Original)        The method of claim 34, wherein the plurality of formations are fins disposed longitudinally across the outer surface of the housing.

41. (Original)        The method of claim 34, wherein the plurality of formations are rings disposed latitudinally across the outer surface of the housing.

42. (Original)        The method of claim 34, further comprising forming the

housing and the reflector an in integral unit.

43. (Previously Presented)      A projection lamp system, comprising:

a projector case;

a lamp housing disposed within the projector case, the lamp housing having a reflector to reflect visible light and passing a radiation emitted from a light source disposed within the reflector; and

a heat dissipating housing coupled to the reflector having an inner surface capable of absorbing the passed radiation from the lamp housing and an outer surface having a plurality of formations to enlarge the area of the outer surface so that the absorbed radiation can be transmitted as heat from the inner surface to the outer surface, wherein the reflector is disposed substantially completely within the heat dissipating housing.

44. (Previously Presented)      The projection lamp system of claim 43, wherein the heat dissipating housing is further capable of blocking the visible light that strays from the reflector.

45. (Previously Presented)      The projection lamp system of claim 44, wherein the inner surface of the heat dissipating housing is prepared to block the stray visible light.

46. (Previously Presented)      The projection lamp system of claim 44, wherein the inner surface of the heat dissipating housing is prepared to enhance absorptivity of the passed radiation.

47. (Previously Presented)      The projection lamp system of claim 46, wherein the inner surface of the heat dissipating housing is prepared to enhance absorptivity of the passed radiation by applying a coating of an opaque material.

48. (Original)      The projection lamp system of claim 47, wherein the opaque

material is paint.

49. (Previously Presented)                      The projection lamp system of claim 46, wherein the inner surface of the heat dissipating housing is prepared to enhance absorptivity of the passed radiation by anodization.

50. (Currently Amended)                      A projection lamp system, comprising:  
a projector case having a touchable surface;  
a lamp housing disposed within the projector case, the lamp housing having a reflector capable of reflecting a visible light but passing a radiation emitted from a light source disposed within the reflector; and

a housing coupled to the reflector, the housing having an inner surface capable of absorbing the passed radiation and an outer surface having a plurality of formations to enlarge the area of the outer surface so that the absorbed radiation can be transmitted as heat from the inner surface to the outer surface at a reduced temperature, and so that the touchable surface of the projector case is within [[the]] safety requirements for touch temperature, wherein the inner surface of the housing is prepared to enhance absorptivity of the passed radiation by peening, wherein the housing is further capable of blocking the visible light that strays from the reflector.

51. (Currently Amended)                      A projection lamp system, comprising:  
a projector case having a touchable surface;  
a lamp housing disposed within the projector case, the lamp housing having a reflector capable of reflecting a visible light but passing a radiation emitted from a light source disposed within the reflector; and  
a housing coupled to the reflector, the housing having an inner surface capable of

absorbing the passed radiation and an outer surface having a plurality of formations to enlarge the area of the outer surface so that the absorbed radiation can be transmitted as heat from the inner surface to the outer surface at a reduced temperature, and so that the touchable surface of the projector case is within [[the]] safety requirements for touch temperature, wherein the inner surface of the housing is prepared to enhance absorptivity of the passed radiation by knurling, wherein the housing is further capable of blocking the visible light that strays from the reflector.

52. (Original)        The projection lamp system of claim 44, wherein the outer surface of the housing blocks the stray visible light.

53. (Cancelled)

54. (Original)        The projection lamp system of claim 43, wherein the absorbed radiation is infrared (IR) radiation.

55. (Original)        The projection lamp system of claim 43, wherein the plurality of formations are plates disposed in a parallel manner across the outer surface of the housing.

56. (Original)        The projection lamp system of claim 43, wherein the plurality of formations are fins disposed longitudinally across the outer surface of the housing.

57. (Original)        The projection lamp system of claim 43, wherein the plurality of formations are rings disposed latitudinally across the outer surface of the housing.

58. (Original)        The projection lamp system of claim 43, wherein the housing and the reflector are formed as an integral unit.

59. (New)        A projection lamp system including a projector case and a lamp housing according to claim 1, wherein the lamp housing is configured to be positioned



substantially within the projector case.

60. (New) The lamp housing of claim 1, wherein the inner surface of the housing is prepared to enhance absorptivity of the passed radiation by peening.

61. (New) The lamp housing of claim 1, wherein the inner surface of the housing is prepared to enhance absorptivity of the passed radiation by knurling.

62. (New) A projection lamp system utilizing the method for managing light and radiation in a lamp according to claim 33.

63. (New) The projection lamp system of claim 43, wherein the inner surface of the housing is prepared to enhance absorptivity of the passed radiation by peening.

64. (New) The projection lamp system of claim 43, wherein the inner surface of the housing is prepared to enhance absorptivity of the passed radiation by knurling.